# Summary of ECS Rel.B.0 Mandatory Metadata Attributes

## Mandatory metadata attributes at the COLLECTION level

### For every ESDT (Minimal, Limited, Intermediate, Full):

One and only one of each:

1. ShortName
2. VersionID
3. LongName
4. CollectionDescription
5. ArchiveCenter
6. RevisionDate
7. VersionDescription

### For Limited level COLLECTION metadata coverage in addition to the above:

At least one of each:

1. ECSDisciplineKeyword
2. ECSTopicKeyword
3. ECSTermKeyword
4. ECSVariableKeyword

Items 5-6 apply to Contact Organization, of which there must be at least one

5. ContactOrganizationName
6. Role

### For Intermediate level COLLECTION metadata coverage in addition to the above:

One and only one of each:

1. CollectionState
2. MaintenanceandUpdateFrequency
3. TimeType
4. DateType
5. TemporalRangeType
6. PrecisionofSeconds
7. EndsatPresentFlag

8. One and only one of the following set:

8.1. TimeofDay

8.2. CalendarDate

- OR -

9. One and only one of the following set:

    9.1. RangeBeginningTime
    9.2. RangeBeginningDate
    9.3. RangeEndingTime
    9.4. RangeEndingDate

- OR -

10. One and only one of the following set:

    10.1. Period1stDate
    10.2. Period1stTime
    10.3. PeriodCycleDurationUnit
    10.4. PeriodCycleDurationValue
    10.5. PeriodDurationUnit
    10.6. PeriodDurationValue
    10.7. PeriodName

- OR -

11. One and only one of the following set:

    11.1. MultipleDateName
    Along with at least two sets of:
    11.2. TimeofDay
    11.3. CalendarDate

One and only one of:

    12. SpatialCoverageType

13. One and only one of the following set:

    13.1. WestBoundingCoordinate
    13.2. NorthBoundingCoordinate
    13.3. EastBoundingCoordinate
    13.4. SouthBoundingCoordinate

- OR -

14. One and only one of the following set:

14.1. PointLatitude
14.2. PointLongitude

- OR -

15. One and only one of the following set:

15.1. CenterLatitude
15.2. CenterLongitude
15.3. RadiusValue
15.4. RadiusUnits

- OR -

16. At least one of the following set:

16.1. ExclusionGRingFlag
Along with at least three sets of:
16.2. GRingPointLatitude
16.3. GRingPointLongitude
16.4. GRingPointSequenceNo


## For Full level COLLECTION metadata coverage in addition to the above:

One and only one of each:

1. ProcessingLevelID
2. ProcessingLevelDescription


## Mandatory metadata attributes at the GRANULE level:

### For every ESDT (Minimal, Limited, Intermediate, Full):

One and only one of each:

1. ShortName
2. VersionID

For Intermediate and Full level GRANULE metadata coverage in addition to the above:

One and only one of each:

1. SizeMBECSDataGranule
2. ProductionDateTime